

Abstract of the Disclosure

DETECTOR AND LOCK CONTROLLER USING SAME

5 A lock controller has main apparatus provided to a lockable door and a detector for detecting an approaching or retreating target object. The detector includes an oscillator device for generating a transmission wave, a branching device for branching the transmission wave, a transmission device for transmitting the transmission wave into space as electromagnetic waves, a reception device for receiving the transmission wave
10 reflected by the target object, a mixer for mixing a reception signal received by the reception device and a branched signal branched by the branching device to output a mixed signal, and a judging device for switching on a detection output indicating the target object approaching and retreating based on an increase and a decrease of the mixed signal outputted from the mixer. A detection distance is set within $1/4$ wavelength of
15 frequency effective for the detection. The main apparatus sends by wireless transmission a specified request signal to a portable device carried by the user, and if an answer signal is received from the portable device in response, causes the lockable part to be unlocked after ascertaining that the received answer signal is a correct signal.

20